

JC07 Rec'd PCT/PTO 16 JAN 20
SEQUENCE LISTING

GENERAL INFORMATION:

(i) APPLICANT: PLANTECHNO S.R.L.

(ii) TITLE OF INVENTION:

SYNTHETIC POLYNUCLEOTIDE ENCODING HUMAN LACTOFERRIN,
VECTORS, CELLS AND TRANSGENIC PLANTS CONTAINING IT

(iii) NUMBER OF SEQUENCES: 22

(iv) CORRESPONDENCE ADDRESS:

(A) ADDRESSEE: Società Italiana Brevetti

(B) STREET: Piazza di Pietra, 39

(C) CITY: Roma

(D) COUNTRY: Italy

(E) POSTAL CODE: I-00186

(v) COMPUTER READABLE FORM:

(A) MEDIUM TYPE:

(B) COMPUTER: IBM PC compatible

(C) OPERATING SYSTEM: PC-DOS/MS-DOS Rev. 5.0

(D) SOFTWARE: Microsoft Word 6.0

(viii) ATTORNEY INFORMATION

(A) NAME: LEONE, Mario (Eng.)

(B) REFERENCE: PC-EBR

(ix) TELECOMMUNICATION INFORMATION

(A) TELEPHONE: 06/695441

(B) TELEFAX: 06/69544830

(C) TELEX: 612287 ROPAT

00226/IT99/00226

(1) INFORMATION FOR SEQ ID NO: 1:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 2079 bp
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: DNA

(ix) FEATURES

- (A) NAME: LFUSYN

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1:

GGC CGT AGG AGA AGG AGT GTT CAA TGG TGC GCA GTA TCA CAA CCA 45

G R R R R S V Q W C A V S Q P

GAG GCC ACA AAA TGC TTC CAA TGG CAA AGG AAT ATG AGA AAA GTT 90

E A T K C F Q W Q R N M R K V

CGT GGA CCT CCT GTA TCT TGC ATA AAG AGA GAT TCA CCC ATC CAG 135

R G P P V S C I K R D S P I Q

TGT ATC CAG GCA ATT GCG GAA AAC AGA GCT GAT GCT GTG ACT CTT 180

C I Q A I A E N R A D A V T L

GAT GGT GGT TTC ATA TAC GAG GCA GGA CTT GCC CCA TAC AAA CTG 225

D G G F I Y E A G L A P Y K L

CGA CCT GTA GCG GCG GAA GTC TAC GGG ACC GAA AGA CAA CCA CGA 270

R P V A A E V Y G T E R Q P R

ACT CAC TAT TAT GCT GTG GCT GTT GTG AAG AAG GGC GGA TCT TTT 315

T H Y Y A V A V V K K G G S F

CAG CTG AAC GAA CTT CAA GGT CTG AAG TCA TGC CAC ACA GGA CTT 360

Q L N E L Q G L K S C H T G L

CGC AGG ACC GCT GGA TGG AAT GTC CCT ATA GGG ACA CTT CGT CCA 405

R R T A G W N V P I G T L R P

TTC TTG AAT TGG ACG GGT CCA CCT GAG CCC ATT GAG GCA GCT GTG 450
 F L N W T G P P E P I E A A V

 GCA AGA TTC TTC TCA GCC TCT TGT GTT CCA GGT GCA GAT AAA GGA 495
 A R F F S A S C V P G A D K G

 CAA TTC CCC AAC CTT TGT CGC CTG TGT GCG GGG ACA GGG GAA AAC 540
 Q F P N L C R L C A G T G E N

 AAA TGT GCA TTC TCA TCC CAG GAA CCG TAC TTC AGC TAC TCT GGT 585
 K C A F S S Q E P Y F S Y S G

 GCC TTT AAG TGT CTT AGA GAC GGT GCT GGA GAT GTT GCT TTT ATT 630
 A F K C L R D G A G D V A F I

 AGA GAG AGC ACA GTG TTT GAG GAT CTT TCA GAC GAG GCT GAA AGG 675
 R E S T V F E D L S D E A E R

 GAC GAG TAT GAG TTA CTC TGC CCA GAC AAC ACT CGT AAG CCA GTT 720
 D E Y E L L C P D N T R K P V

 GAC AAG TTC AAA GAT TGC CAT CTT GCA CGG GTC CCT TCT CAT GCC 765
 D K F K D C H L A R V P S H A

 GTT GTG GCA CGA AGT GTT AAT GGA AAG GAG GAT GCC ATC TGG AAT 810
 V V A R S V N G K E D A I W N

 CTT CTC CGC CAA GCA CAG GAA AAG TTT GGA AAG GAC AAG TCA CCG 855
 L L R Q A Q E K F G K D K S P

 AAA TTC CAG CTC TTT GGT TCC CCT AGT GGG CAG AAA GAT CTT CTG 900
 K F Q L F G S P S G Q K D L L

 TTC AAG GAC TCT GCC ATT GGG TTT TCG AGA GTG CCA CCT AGG ATA 945
 F K D S A I G F S R V P P R I

GAT TCT GGG TTG TAC CTT GGC TCC GGA TAC TTT ACT GCA ATT CAG 990
 D S G L Y L G S G Y F T A I Q

AAC TTG AGG AAA AGT GAG GAG GAA GTT GCT GCC CGG CGT GCG CGG 1035
 N L R K S E E V A A R R A R

GTC GTT TGG TGT GCG GTG GGA GAG CAA GAG TTG CGC AAG TGT AAC 1080
 V V W C A V G E Q E L R K C N

CAG TGG AGT GGT TTG AGC GAA GGA TCT GTG ACC TGC TCA TCG GCC 1125
 Q W S G L S E G S V T C S S A

TCC ACT ACA GAA GAT TGC ATC GCC CTG GTG TTG AAA GGA GAA GCT 1170
 S T T E D C I A L V L K G E A

GAT GCC ATG AGT TTG GAT GGA GGA TAT GTT TAC ACT GCA GGT AAA 1215
 D A M S L D G G Y V Y T A G K

TGT GGT TTG GTG CCT GTC CTT GCA GAG AAC TAC AAA TCA CAA CAA 1260
 C G L V P V L A E N Y K S Q Q

AGC AGT GAC CCT GAT CCT AAC TGT GTG GAT AGA CCT GTG GAA GGA 1305
 S S D P D P N C V D R P V E G

TAT CTT GCT GTG GCG GTG GTT AGG AGA TCA GAC ACT AGC CTT ACC 1350
 Y L A V A V V R R S D T S L T

TGG AAC TCT GTG AAA GGC AAG AAG TCC TGC CAC ACC GCC GTG GAC 1395
 W N S V K G K K S C H T A V D

AGG ACT GCA GGT TGG AAT ATC CCC ATG GGA TTG CTC TTC AAC CAG 1440
 R T A G W N I P M G L L F N Q

ACG GGC TCC TGC AAA TTT GAT GAA TAT TTC AGT CAA AGC TGT GCC 1485
 T G S C K F D E Y F S Q S C A

CCT GGT TCT GAC CCA AGA TCT AAT CTC TGT GCT TTG TGT ATT GGA 1530

DRAFT - EMBODIMENT 4

P	G	S	D	P	R	S	N	L	C	A	L	C	I	G	
GAT	GAG	CAA	GGT	GAG	AAT	AAG	TGC	GTT	CCC	AAC	AGC	AAC	GAG	AGA	1575
D	E	Q	G	E	N	K	C	V	P	N	S	N	E	R	
TAC	TAC	GGT	TAC	ACT	GGG	GCT	TTC	CGT	TGC	TTG	GCT	GAG	AAT	GCT	1620
Y	Y	G	Y	T	G	A	F	R	C	L	A	E	N	A	
GGA	GAC	GTT	GCA	TTT	GTG	AAA	GAT	GTC	ACT	GTC	TTG	CAG	AAC	ACT	1665
G	D	V	A	F	V	K	D	V	T	V	L	Q	N	T	
GAT	GGA	AAT	AAC	AAT	GAG	GCA	TGG	GCT	AAG	GAT	TTG	AAG	CTT	GCA	1710
D	G	N	N	N	N	E	A	W	A	K	D	L	K	L	A
GAC	TTT	GCG	TTG	CTG	TGC	CTC	GAT	GGC	AAA	CGT	AAG	CCT	GTG	ACT	1755
D	F	A	L	L	C	L	D	G	K	R	K	P	V	T	
GAA	GCT	AGA	AGC	TGC	CAT	CTT	GCC	ATG	GCC	CCG	AAT	CAT	GCT	GTG	1800
E	A	R	S	C	H	L	A	M	A	P	N	H	A	V	
G TG	TCT	CGT	ATG	GAT	AAG	GTG	GAA	CGC	TTG	AAA	CAG	GTG	TTG	CTC	1845
V	S	R	M	D	K	V	E	R	L	K	Q	V	L	L	
CAC	CAA	CAG	GCT	AAA	TTT	GGT	AGA	AAT	GGA	TCT	GAC	TGC	CCG	GAC	1890
H	Q	Q	A	K	F	G	R	N	G	S	D	C	P	D	
AAG	TTT	TGC	TTA	TTC	CAG	TCT	GAA	ACC	AAA	AAC	CTT	TTG	TTC	AAT	1935
K	F	C	L	F	Q	S	E	T	K	N	L	L	F	N	
GAC	AAC	ACT	GAG	TGT	CTT	GCC	AGA	CTC	CAT	GGC	AAA	ACA	ACA	TAT	1980
D	N	T	E	C	L	A	R	L	H	G	K	T	T	Y	
GAA	AAA	TAT	TTG	GGA	CCA	CAG	TAT	GTC	GCA	GGC	ATT	ACT	AAT	CTG	2025
E	K	Y	L	G	P	Q	Y	V	A	G	I	T	N	L	
AAA	AAG	TGC	TCA	ACC	TCC	CCA	CTC	CTA	GAA	GCC	TGT	GAA	TTC	CTA	2070
K	K	C	S	T	S	P	L	L	E	A	C	E	F	L	

AGG AAG TAA

2079

R K *

(2) INFORMATION FOR SEQ ID NO: 2:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 30 bp
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: oligonucleotide

(ix) FEATURES

- (A) NAME: PLT46

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2:

GGATCCATGG GCCGTAGGAG AAGGAGTGTT

30

(3) INFORMATION FOR SEQ ID NO: 3:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 32 bp
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: oligonucleotide

(ix) FEATURES

- (A) NAME: PLT 47

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3:

GAGCTCCTTC GGTTTACTT CCTGAGGAAT TC

32

(4) INFORMATION FOR SEQ ID NO: 4:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 42 bp
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: oligonucleotide

(ix) FEATURES

(A) NAME: PLT 48

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 4:

TCTAGATAAA ATAATCTATA CATTAAAAAA TTTGATTTA AA 42

(5) INFORMATION FOR SEQ ID NO: 5:

(i) SEQUENCE CHARACTERISTICS

(A) LENGTH: 36 bp

(B) TYPE: nucleic acid

(C) STRANDEDNESS: single

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: oligonucleotide

(ix) FEATURES

(A) NAME: PLT 49

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 5:

GGATCCGACT GAGTCGGATA AGAAGAAAAG AAAAGA 36

(6) INFORMATION FOR SEQ ID NO: 6:

(i) SEQUENCE CHARACTERISTICS

(A) LENGTH: 36 bp

(B) TYPE: nucleic acid

(C) STRANDEDNESS: single

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: oligonucleotide

(ix) FEATURES

(A) NAME: PLT 50

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 6:

TCTAGAGTTT TCAAATTGGA ATTTTAATGT GTGTTG 36

(7) INFORMATION FOR SEQ ID NO: 7:

(i) SEQUENCE CHARACTERISTICS

(A) LENGTH: 36 bp

(B) TYPE: nucleic acid

(C) STRANDEDNESS: single

- (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: oligonucleotide
- (ix) FEATURES
- (A) NAME: PLT 51
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 7:

GGATCCCACC TTAAGGAGGT TGCAACGAGC GTGGCA 36

(8) INFORMATION FOR SEQ ID NO:8:

- (i) SEQUENCE CHARACTERISTICS
 - (A) LENGTH: 250 bp
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: oligonucleotide
- (ix) FEATURES
 - (A) NAME: PLT 120
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:8:

GGC CGT AGG AGA AGG AGT GTT CAA TGG TGC GCA GTA TCA CAA CCA GAG

GCC ACA AAA TGC TTC CAA TGG CAA AGG AAT ATG AGA AAA GTT CGT GGA

CCT CCT GTA TCT TGC ATA AAG AGA GAT TCA CCC ATC CAG TGT ATC CAG

GCA ATT GCG GAA AAC AGA GCT GAT GCT GTG ACT CTT GAT GGT GGT TTC

ATA TAC GAG GCA GGA CTT GCC CCA TAC AAA CTG CGA CCT GTA GCG GCG

GAA GTC TAC G

(9) INFORMATION FOR SEQ ID NO:9:

- (i) SEQUENCE CHARACTERISTICS
 - (A) LENGTH: 250 bp
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear

- (ii) MOLECULE TYPE: oligonucleotide
- (ix) FEATURES
 - (A) NAME: PLT 121
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:9:

GC ACC TGG AAC ACA AGA GGC TGA GAA GAA TCT TGC CAC AGC TGC CTC

AAT GGG CTC AGG TGG ACC CGT CCA ATT CAA GAA TGG ACG AAG TGT CCC

TAT AGG GAC ATT CCA TCC AGC GGT CCT GCG AAG TCC TGT GTG GCA TGA

CTT CAG ACC TTG AAG TTC GTT CAG CTG AAA AGA TCC GCC CTT CTT CAC

AAC AGC CAC AGC ATA ATA GTG AGT TCG TGG TTG TCT TTC GGT CCC GTA

GAC TTC CGC CG

(10) INFORMATION FOR SEQ ID NO:10:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 250 bp
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: oligonucleotide

(ix) FEATURES

- (A) NAME: PLT 122

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:10:

AAC TGG CTT ACG AGT GTT GTC TGG GCA GAG TAA CTC ATA CTC GTC

CCT TTC AGC CTC GTC TGA AAG ATC CTC AAA CAC TGT GCT CTC TCT

AAT AAA AGC AAC ATC TCC AGC ACC GTC TCT AAG ACA CTT AAA GGC

ACC AGA GTA GCT GAA GTA CGG TTC CTG GGA TGA GAA TGC ACA TTT

GTT TTC CCC TGT CCC CGC ACA CAG GCG ACA AAG GTT GGG GAA TTG

TCC TTT ATC TGC ACC TGG AAC ACA A

(11) INFORMATION FOR SEQ ID NO:11:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 255 bp
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: oligonucleotide

(ix) FEATURES

- (A) NAME: PLT 123

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:11:

GTA CAA CCC AGA ATC TAT CCT AGG TGG CAC TCT CGA AAA CCC AAT GGC

AGA GTC CTT GAA CAG AAG ATC TTT CTG CCC ACT AGG GGA ACC AAA GAG

CTG GAA TTT CGG TGA CTT GTC CTT TCC AAA CTT TTC CTG TGC TTG GCG

GAG AAG ATT CCA GAT GGC ATC CTC CTT TCC ATT AAC ACT TCG TGC CAC

AAC GGC ATG AGA AGG GAC CCG TGC AAG ATG GCA ATC TTT GAA CTT GTC

AAC TGG CTT ACG AGT

(12) INFORMATION FOR SEQ ID NO:12:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 251 bp
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: oligonucleotide

(ix) FEATURES

- (A) NAME: PLT 124

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:12:

PCT/IT99/00226

TA TCC TCC ATC CAA ACT CAT GGC ATC AGC TTC TCC TTT CAA CAC CAG
GGC GAT GCA ATC TTC TGT AGT GGA GGC CGA TGA GCA GGT CAC AGA TCC
TTC GCT CAA ACC ACT CCA CTG GTT ACA CTT GCG CAA CTC TTG CTC TCC
CAC CGC ACA CCA AAC GAC CCG CGC ACG CCG GGC AGC AAC TTC CTC CTC
ACT TTT CCT CAA GTT CTG AAT TGC AGT AAA GTA TCC GGA GCC AAG GTA
CAA CCC AGA ATC

(13) INFORMATION FOR SEQ ID NO:13:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 75 bp
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: oligonucleotide

(ix) FEATURES

(D) OTHER INFORMATION: leader sequence of protein 7S
basic globulin

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:13:

ATGGCTTCTA TCCTCCACTA CTTTTAGCC CTCTCTCTT CTTGCTCTT 50
TCTTTCTTC TTATCCGACT CAGTC 75

(14) INFORMATION FOR SEQ ID NO:14:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 191 bp
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: oligonucleotide

(ix) FEATURES

(D) OTHER INFORMATION: leader sequence of protein β -
conglycinine

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:14:

PCT/IT99/00226

ATGATGAGAG CGCGGTTCCC ATTACTGTTG CTGGGAGTTG TTTTCCTAGC 50
ATCAGTTTCT GTCTCATTG GCATTGCGTA TTGGGAAAAG CAGAACCCCA 100
GTCACAAACAA GTGCCTCCGA AGTTGCAATA GCGAGAAAAGA CTCCTACAGG 150
AACCAAGCAT GCCACGCTCG TTGCAACCTC CTTAAGGTG 189

(15) INFORMATION FOR SEQ ID NO:15:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 250 bp
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: oligonucleotide

(ix) FEATURES

(A) NAME: PLT 125

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:15:

GAGCAATCCC ATGGGGATAT TCCAACCTGC AGTCCTGTCC ACGGCGGTGT 50
GGCAGGACTT CTTGCCTTTC ACAGAGTTCC AGGTAAGGCT AGTGTCTGAT 100
CTCCTAACCA CCGCCACAGC AAGATATCCT TCCACAGGTC TATCCACACACA 150
GTTAGGATCA GGGTCACTGC TTTGTTGTGA TTTGTAGTTC TCTGCAAGAC 200
AGGCACCAAA CCACATTTAC CTGCAGTGTAAACATATCCT CCATCCAAAC 250

(16) INFORMATION FOR SEQ ID NO:16:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 254 bp
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: oligonucleotide

(ix) FEATURES

(A) NAME: PLT 126

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:16:

CCATCAGTGT TCTGCAAGAC AGTGACATCT TTCACAAATG CAACGTCTCC 50
AGCATTCTCA GCCAAGCAAC GGAAAGCCCC AGTGTAAACCG TAGTATCTCT 100
CGTTGCTGTT GGGAACGCAC TTATTCTCAC CTTGCTCATC TCCAATACAC 150
AAAGCACAGA GATTAGATCT TGGGTCAGAA CCAGGGGCAC AGCTTTGACT 200
GAAATATTCA TCAAATTGCA AGGAGCCCCGT CTGGTTGAAG AGCAAGCCCCA 250
TGGG 254

TGGG 254

(17) INFORMATION FOR SEQ ID NO:17:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 229 bp
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: oligonucleotide

(ix) FEATURES

- (A) NAME: PLT 127

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:17:

GCAGTCAGAT CCATTCTAC CAAATTTAGC CTGTTGGTGG AGCAACACCT 50
GTTTCAAGCG TTCCACCTTA TCCATACGAG ACACCACAGC ATGATTGGG 100
GCCATGGCAA GATGGCAGCT TCTAGTTCA GTCACAGGCT TACGTTGCC 150
ATCGAGGCAC AGCAACGCAA AGTCTGCAAG CTTCAAATCC TTAGCCATG 200
CCTCATTGTT ATTTCCATCA GTGTTCTGC 229

(18) INFORMATION FOR SEQ ID NO:18:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 210 bp
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: oligonucleotide

(ix) FEATURES

- (A) NAME: PLT 128

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:18:

TTACTTCCTT AGGAATTACAC AGGCTTCTAG GAGTGGGGAG GTTGAGCACT 50
TTTTCAGATT AGTAATGCCT GCGACATACT GTGGTCCCAA ATATTTTCA 100
TATGTTGTT TGCCATGGAG TCTGGCAAGA CACTCAGTGT TGTCAATTGAA 150
CAAAAGGTTT TTGGTTTCAG ACTGGAATAA GCAAAACTTG TCCGGGCAGT 200
CAGATCCATT 210

(19) INFORMATION FOR SEQ ID NO:19:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 30 bp
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: oligonucleotide

(ix) FEATURES

(A) NAME: PLT 129

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:19:

GGATCCATGG GCCGTAGGAG AAGGAGTGT

30

(20) INFORMATION FOR SEQ ID NO:20:

(i) SEQUENCE CHARACTERISTICS

(A) LENGTH: 28 bp

(B) TYPE: nucleic acid

(C) STRANDEDNESS: single

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: oligonucleotide

(ix) FEATURES

(A) NAME: PLT 120

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:20:

GAGCTCTTAC TTCCTTAGGA ATTCACAG

28

(21) INFORMATION FOR SEQ ID NO:21:

(i) SEQUENCE CHARACTERISTICS

(A) LENGTH: bp

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: DNA

(ix) FEATURES

(D) OTHER INFORMATION: sequence of promoter of gene
encoding 7S basic globulin

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:21:

TAAAATAATC TATACTTAA AAAATTTGAT TTTAAAATT TAGAAATTCA	50
TGATTTTATT TTTTTTACG AGAAATCCGT TAATATTGTT AAAATATTAC	100
CAACTAATTG ATAAATTTA TTTAAGGCA ATTAAGCATG TTTGATAAAA	150
TATATATATT GTTATAAATA CTTTCAAAAA GTATAAAGTT GATGATGGCG	200
TGGTGGTAGA TTATTTAGT TCTAGGTTCG AATGCAAGTT GGTTTAGACA	250
TTTAGCCTTA TTCTTTTTC TAACCAAAAT AAATGAAAT GGAAACCTT	300
TAGGAAAAAA AAGAAATCAA AATTGAAAAC ATCATCCGGT GGAGTCGAGA	350
AGCCCCACACC CACGTGACCC AACAAATATTA AAATAAGAGT TTGCTCTACA	400

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GTAAATGCGA TACTTTTTA TTCAATACTT TTTCCACTTC TAAAATCTTG 450
 GAGATTTGCA CCGTTAACTA ATTAAGTGTGTT ATATCCAACG GTCCTAAAAA 500
 AACTTGTGTA CCGTGCCTCA CATTCAACT TTGCGCACCC TGAAAGCCGT 550
 TATGTTTAGG TTAGTGTGTTG CAACAGTTGA AGCGCATCAC TCAGGAGGCT 600
 ACTTGGTCTT GCTTTGCGT CTTTGTGTTCA ATTTTCACG TGATTTGTT 650
 GGTGAACACG CGTACTTGAA ACTTATTATA AATTACATAA TTTTATAAGT 700
 TTCACTTCTT ATATAACT CATATAATAT ATAGGGTTA GAATGCCAAT 750
 TTTTAAAAAA AGAATAAAAAA AATAAATAGA ATAAAATCGA AAAAATGAAA 800
 TGTAAAAAAT TTGAGGGGGA CAAATAAAAT ATGAAAGTCT ATTATTTAAA 850
 TTTCCATTAA GAATTCTATT TTCCCTAGTT AATATGAGCT AGCCAGTTGG 900
 GAGATACACG AAAATGTCAT GAAACAGTTG CATGTAGGGA AATTAATGTA 950
 GTAGAGGGAT AGCAAGACAA AAATCCAAGC CAAGCTAGCT GCTCACGCGA 1000
 ACTCGATCCA CACGTCCTT ACAGAGTTTC AAACGGATGA AATCTGCATG 1050
 GCATGCAACT AAAGCATTGT TCTCAGCTGC CAAGTACCCC TCACACTCAC 1100
 CAACCCTTG TTTTCTCCC CATTGCATGT TAACTCAAGT TTATCCTTTC 1150
 TTTGCTTCTG GAAATTTCAC AAGCCTCAAA CACGTCGACG TCCAATCTTG 1200
 TGACCAACAC GGCCAAAAGA AAAGAGAACATC TCATCCCGTT CACACTTAGC 1250
 CACTTAAAGC TAGCCAAACG GTGATCTTTC TCTATATATT GTAGCTCTCT 1300
 AACACAAACCA ACACCTACCAT TATTCAATAT TCAAACCTTG CTCTATACTA 1350
 CACACACTAG AAGAATA 1367

(22) INFORMATION FOR SEQ ID NO:22:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: bp
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: DNA

(ix) FEATURES

(D) OTHER INFORMATION: sequence of promoter of gene coding for β -conglycinine

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:22:

GTTTTCAAAT TTGAATTGTTA ATGTGTGTTG TAAGTATAAA TTTAAATAA 50
 AAATAAAAAC AATTATTATA TCAAAATGGC AAAAACATTT AATACGTATT 100
 ATTTATTAAA AAAATATGTA ATAATATATT TATATTTAA TATCTATTCT 150
 TATGTATTTT TTAAAAATCT ATTATATATT GATCAACTAA AATATTTTA 200
 TATCTACACT TATTTGCAT TTTTATCAAT TTTCTGCGT TTTTGGCAT 250

ATTTAATAAT GACTATTCTT TAATAATCAA TCATTATTCT TACATGGTAC 300
ATATTGTTGG AACCATATGA AGTGTTCATT GCATTTGACT ATGTGGATAG 350
TGTTTGATC CATGCCCTTC ATTTGCCGCT ATTAATTAAAT TTGGTAACAG 400
ATTCGTTCTA ATCAGTTACT TAATCCTTCC TCATCATAAT TAATCTGGTA 450
GTTCGAATGC CATAATATTG ATTAGTTTT TGGACCATAA GAAAAAGCCA 500
AGGAACAAAAA GAAGACAAAAA CACAATGAGA GTATCCTTTG CATAAGCAATG 550
TCTAAGTTCA TAAAATTCAA ACAAAAACGC AATCACACAC AGTGGACATC 600
ACTTATCCAC TAGCTGATCA GGATCGCCGC GTCAAGAAAA AAAAAGTGGGA 650
CCCCAAAAGC CATGCACAAC AACACGTACT CACAAAGGCG TCAATCGAGC 700
AGCCCCAAAC ATTCCACCAAC TCAACCCATC ATGAGCCCCAC ACATTTGTTG 750
TTTCTAACCC AACCTCAAAC TCGTATTCTC TTCCGCCACC TCATTTTGT 800
TTATTTCAAC ACCCGTCAAA CTGCATCCCA CCCCCTGGCC AAATGTTCAT 850
GCATGTTAAC AAGACCTATG ACTATAAATA TCTGCAATCT CGGCCAAGT 900
TTTCATCATC AAGAACCAAGT TCAATATCCT AGTACGCCGT ATTAAAGAAT 950
TTAAGATATA CT 962

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